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(54) **Wideband wireless communications architecture**

(57) A wireless communication network and architecture is disclosed. The network generally establishes a source node transmit window (108, 702) (during which a type A node transmits signals) and a source node receive window (110, 702) (during which the type A node receives signals). The node may then transmit over a CDMA link during the source node transmit window (108, 712) to a destination node. Similarly, the source node receives over the CDMA link from the destination node during the source node receive window (110, 714). The duration of the source node transmit and source node receive windows (108, 110) may be chosen freely, and may even be unequal in duration. Type B nodes adopt the opposite transmit and receive timing as a type A node

after assimilation. During assimilation, a source node selects a first assignable CDMA spreading code (704) for use in a first communication link, and transmits during the source node transmit window (108) a reservation channel carrying the first assignable CDMA spreading code. The source node (602) may then detect a handshaking response during the source node receive window (110) and in response select a second assignable CDMA spreading code for the next communication link. The source node (602) then transmits during the source node transmit window (108) the reservation channel carrying the second assignable CDMA spreading code. In this fashion, new nodes may assimilate to the network (and transmit their own reservation channels) until all available spreading codes are in use.

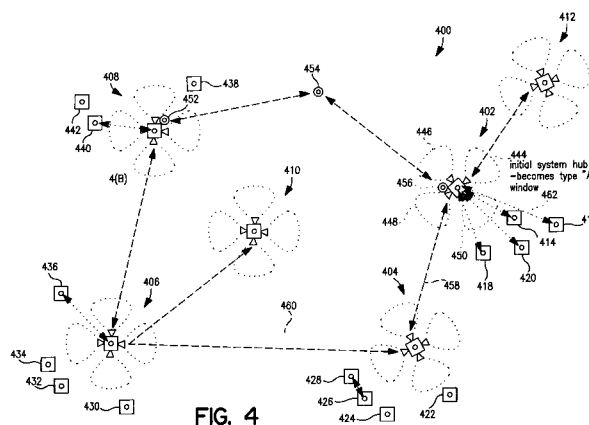


FIG. 4



EUROPEAN SEARCH REPORT

Application Number
EP 00 11 9385

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 3 November 2008	Examiner Cabañas Prieto, Ana
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.92 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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